Melody Flora
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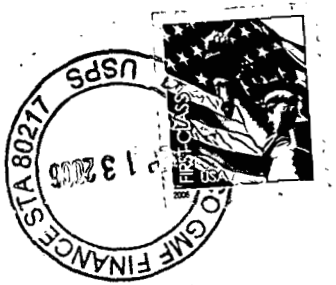

U.S. Department of Energy,
Attention: Proposed Plan Comments
Rocky Flats Environmental Technology Site
12101 Airport Way, Unit A,
Broomfield, CO 80021-2583

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September 13, 2006

U.S. Department of Energy,
Attention: Proposed Plan Comments
Rocky Flats Environmental Technology Site
12101 Airport Way, Unit A,
Broomfield, CO 80021-2583

Dear DOE,

After reviewing the Proposed Plan for the Rocky Flats Environmental Technology Site, it appears that there are still data collection efforts which have not been completed. Specifically, the Ecological Risk Assessment (ERA) repeatedly concludes that "there are no ecological contaminants of concern" ... "because there are no significant risks to ecological receptors or high levels of uncertainty with the data." However, the ERA consistently highlights that "there is considerable uncertainty (low confidence) in the default risk model," or "a high level of uncertainty associated with the use of the upper-bound BAF [bioaccumulation factor]," or "chemical-specific uncertainties." In fact, for most of the exposure units, the calculated hazard quotients using 'conservative' Tier 1 Exposure Point Concentrations (EPCs) and default exposure assumptions were substantially greater than the acceptable value of 1. However, at this stage, professional judgement was used to revise the EPCs and/or decide if contaminants with analytical detection limits above the Ecological Screening Level (ESL) are likely to exist in the surface soils of the exposure unit. This professional judgement determination is conducted after DOE has concluded within the ERA report that the data set available is suitable for use in evaluating potential risk to ecological receptors.

The professional judgement is further used to dismiss contaminants with limited numbers of detections, stating that the "population-level risk from a few detections in an area as large as the" exposure unit is highly unlikely. However, it is not the size of the exposure unit which should dictate the likelihood of risk but rather the home range of the species under consideration. In addition, limited numbers of detections does not automatically imply that the contaminant is not more widespread; but rather that the sampling program did not sample every square foot of soil to determine the exact extent of the contaminant. For example, if the home range of the species is ¼ acre, and 4 of the 6 detections occurred within the same ¼ acre, then there would likely be an impact on the individuals of the species, potentially enough to present a population-level risk if there are unique habitat conditions within the ¼ acre.

It would seem that if DOE wants to know what contaminants are actually in the surface soil, then a sampling program which uses the appropriate analytes and detection limits should be implemented so that it can be assessed if there are concentrations of contaminants that exceed the ESL. The sampling program should include a consideration of home range considerations so that the frequency of the sampling is adequate to assess if there are 'hot spots' which may impact the health of species' populations. In addition, DOE should ensure that the analyte list incorporates the appropriate chemical analysis, i.e., chromium VI versus chromium III, so that the hazard quotient isn't calculated based on an assumed chemical composition of the surface

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soil as was done for the Industrial Area. This approach should allow DOE to more definitively assess the potential risks to ecological receptors due to exposure from residual contamination at Rocky Flats.

If DOE does not agree that additional data is needed to more definitively assess the ecological risk present at Rocky Flats before proceeding with the Record of Decision, it would seem that the monitoring to be included in Alternative 2 should be modified to incorporate each of the recommendations above so that additional action(s) can be taken if ecological risk concerns are identified by the empirical data collected rather than the assumptions currently used. In fact, the proposed plan should be revised to include a contingency remedy that will address any future ecological concerns based on the ecological monitoring and site characterization to be performed.

With regard to the 'Overall Protection of Human Health and the Environment' criteria, the Proposed Plan states that the incremental risk to the Wildlife Refuge Worker falls within the acceptable range of $1x10^{-6}$ to $1x10^{-4}$. However, this incremental risk is based upon the residual contamination currently left on-site and does not reflect the 'baseline' condition of Rocky Flats prior to initiating interim remedy actions. While, the National Contingency Plan (NCP) does indicate that risks within the $1x10^{-6}$ to $1x10^{-4}$ range are acceptable; this approach is based on the baseline site conditions which likely exceeded the $1x10^{-4}$ criterion. When the 1x10-4 criterion is exceeded, then the preferred approach for the remedy is to meet the $1x10^{-6}$ incremental risk concentrations. It would seem that DOE is skirting the NCP expectation for the degree of cleanup at a CERCLA site by using current data to support no additional soil excavation.

For all the reasons cited above, the proposed plan for the Rocky Flats site, Alternative 2, does not meet the regulatory requirements for completing the cleanup of the site. Instead, the Record of Decision should be delayed until a sampling program is conducted (as recommended above) that provides additional information to truly calculate the ecological risk present at the site. If the Record of Decision is not delayed, then Alternative 3 should be modified to include a contingency alternative that allows for future cleanup actions, if warranted by the results of an additional ecological investigation (as recommended above). Thank you for your careful consideration of these comments.

Sincerely,

Melody Flora

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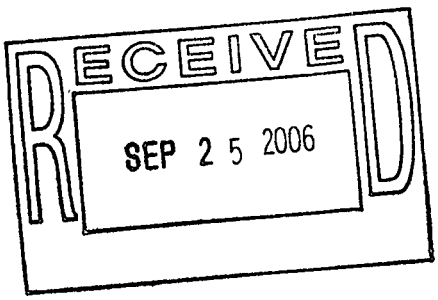

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